PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

• •	or agent's file reference 003059 PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416					
International	application No.	International filing date (day/m	nonth/year) Priority date (day/month/year)					
	R2004/001862	15.07.2004	16.07.2003					
International Patent Classification (IPC) or national classification and IPC								
B32B17/10, B60R1/08								
BJZBII/IU, BUUNI/UU								
Applicant								
SAINT-GOBAIN GLASS FRANCE								
und	der Article 35 and transmitted to the	he applicant according to Article	ablished by this International Preliminary Examining Authority 36.					
2. Th	nis REPORT consists of a total of	8	sheets, including this cover sheet.					
3. Th	nis report is also accompanied by A	ANNEXES, comprising:						
a.	(sent to the applicant and	d to the International Bureau) a t	total of sheets, as follows:					
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or							
	sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
ļ	sheets which supers	sede earlier sheets, but which th	nis Authority considers contain an amendment that goes beyond					
	the disclosure in th Box.	he international application as fi	iled, as indicated in item 4 of Box No. I and the Supplemental					
b.		! Bureau only) a total of (indicate	e type and number of electronic carrier(s))					
]		and a series of fundament						
	related thereto, in compute	T readable form only, as indicat	, containing a sequence listing and/or tables ted in the Supplemental Box Relating to Sequence Listing (see					
<u></u>	Section 802 of the Adminis							
4. Th	his report contains indications relat	ting to the following items:						
j D	Box No. I Basis of the	æ report						
	Box No. II Priority							
	Box No. III Non-establ	lishment of opinion with regard	to novelty, inventive step and industrial applicability					
	Box No. IV Lack of unity of invention							
[2	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
	Box No. VI Certain documents cited							
[Box No. VII Certain de	efects in the international applicat	tion					
Ī	_	oservations on the international a						
Date of			f completion of this report					
Date of sub	mission of the demand	Date of	a completion of this report					
Nome	nailing address of the INC + CD	A	rized officer					
Name and mailing address of the IPEA/EP		Author	INC OTHER					
Facsimile N	Ĭo.	Telenh	ione No.					

Translation

International application No.
PCT/FR2004/001862

Box No. I	Basis of the report						
	 With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item. 						
	This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:						
	international search (Rule 12.3 and 23.1(b))						
	publication of the international application (Rule 12.4)						
	international preliminary examination (Rule 55.2 and/						
recei	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):						
	the international application as originally filed/furnished						
	the description:						
		as originally filed/furnished					
!	- -	received by this Authority on					
	pages*	received by this Authority on					
	the claims:						
	nos. <u>1–23</u>	as originally filed/furnished					
	nos.*	as amended (together with any statement) under Article 19					
		received by this Authority on					
		received by this Authority on					
	the drawings:						
	sheets 1/3-3/3	as originally filed/furnished					
		received by this Authority on					
		received by this Authority on					
	a sequence listing and/or any related table(s) - see Supplement						
,							
3.	The amendments have resulted in the cancellation of:						
	the description, pages						
	the claims, nos.						
	the drawings, sheets/figs						
		ndments annexed to this report and listed below had not been made, since					
4.	they have been considered to go beyond the disclosure as	filed, as indicated in the Supplemental Box (Rule 70.2(c)).					
	the description, pages						
	the claims, nos.						
	the drawings, sheets/figs						
	the sequence listing (specify):						
	any table(s) related to sequence listing (specify):						
* If it	* If item 4 applies, some or all of those sheets may be marked "superseded."						

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В	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
1.	Statement						
	Novelty (N)	Claims 2, 10-16, 19, 21, 22	ES				
		Claims 1, 3-9, 17, 18, 20, 23 No	0				
	Inventive step (IS)	ClaimsY	ES				
		Claims 1-23 No.	O				
	Industrial applicability (IA)	Claims 1-23 Y	ES				
		ClaimsN	О				
2	Citations and explanations (Rule	70.7)					
-	1. In the present report, reference is made to the						
	following documents:						
	Tollowing documents.						
	D1: FR 2	829 723 A (SAINT GOBAIN) 21 March 2003					
1		3-03-21);					
	D3: US 20	003/064198 A1 (VEERASAMY VIJAYEN S ET AL)					
	3 Apr	ril 2003 (2003-04-03);					
	D2: EP 0	353 141 A (SAINT GOBAIN VITRAGE) 31					
	Janua	ary 1990 (1990-01-31);					
	D4: US 4	654 067 A (RAMUS KEVIN J ET AL) 31 March					
	1987	(1987-03-31);					
	D5: FR 2	227 123 A (JENAER GLASWERK SCHOTT & GEN)					
	22 No	ovember 1974 (1974-11-22);					
	D6: BE 7	02 812 A (LIBBY OWENS FORD GLASS CO.) 19					
	Febru	uary 1968 (1968-02-19);					
	D7: PATE	NT ABSTRACTS OF JAPAN vol. 015, no. 306					
	(C-08	856), 6 August 1991 (1991 -08-06) & JP 03					
	1151	42 A (NISSAN MOTOR CO LTD; others: 01), 16					
	May	1991 (1991-05-16);					
	D8: US 5	239 406 A (LYNAM NIALL R) 24 August 1993					
	(199	3-08-24).					
	2. The inte	rnational application relates to a glass					

Box No. V

panel characterised in that it has an active system on the inside surface (2) of the first rigid substrate (claim 1), which substrate preferably consists of glass (claim 4).

2.1 Dependent claims 2 and 3 disclose examples of said active system.

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;

It follows that these claims envisage the use, as an active system, of an electrically controllable system such as the ones indicated in claim 2, or a stack of thin films having either thermal or acoustic functions or absorbent, thermochromic or thermotropic optical functions (claim 3).

2.2 Claim 4 discloses that the substrates are made of glass.

Claims 5 to 8 define the total thickness and the relative sizes of the substrates.

Claim 9 relates to a peripheral opacifying coating, claim 10 discloses a margin line around the edge of surface (2) and claims 11 to 16 relate to peripheral seals.

Claims 17 to 20 list a plurality of possible uses for the glass panel, including the use thereof as a motor vehicle windscreen (claim 18). Claims 21 and 22 characterise the substrate.

It should be noted that none of the dependent

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claims defines the features of the active system in claims 1 to 3.

A person skilled in the art is necessarily aware of the operation of such a system in a glass panel suitable for a variety of possible uses.

It follows that the features of the active system are less important. What is important, as confirmed by the characterising portion in claim 1, is that the active system is on the inside surface of the first substrate, which is the outwardly facing substrate.

PCT Article 33(2) and 33(3)

3.1 The international search report contains citations which demonstrate that, with the exception of an electrochromic system, it would be obvious to form an active system on the inside surface of the first substrate.

The set of claims in document D1 teaches the features in most of the present dependent claims.

Claim 21 in document D1 discloses that the outside surface of the second substrate is the preferred location for an electrochromic system.

With regard to active systems in general, claim 9 in D1 notes that such a system can be located on

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the outside or the inside surface of substrate S2.

D1 does not mention surface 2 of first substrate S1.

Nevertheless, by referring to prior art teachings in this field, a person skilled in the art would discover that such an alternative is possible.

3.2 First of all, figure 2 in document D2 demonstrates how surface 2 of a first substrate can be cleaned so as to prepare same for subsequently receiving an anti-reflective coating.

Document D3 then teaches that an electrically conductive film can have various functions, irrespective of whether it is on surface 2 or 3 (D3, column 7, lines 7 to 12).

Document D4 discloses a motor vehicle windscreen that includes two curved glass sheets of different sizes. The larger sheet is located on the outside of the glass panel (column 2, lines 22-24).

In column 2, D4 discusses steps of forming an electrically conductive film and its electrical connections (on the same surface: see lines 19 to 31) but makes no differentiation between the two glass sheets.

Moreover, in lines 1 and 2 in column 3, it is explicitly disclosed that it is the longer of the

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

glass sheets that receives the electrically conductive film.

It follows that it is surface 2 of said sheet that is coated.

An electrically conductive film for de-icing a windscreen is an active system including a stack of at least one film.

As a result, document D4 anticipates all of the features in claim 1.

3.3 In view of this prior art, all that remains to be said is that the incorporation of phototropic or photochromic systems in a glass panel has already been suggested.

With regard to phototropic systems, reference can be made to document D5, figures 1 and 2 in combination with example 1 and the claims, and to document D6, figure 5, table A on page 17 and the text on page 18, lines 13 to 26.

Figure 6 in document D7 shows a photochromic film located on surface 2 of a glass panel.

3.4 Other examples of the active system are presented on pages 2 to 4 of the description in the application, including the disclosure of document D8, which relates to a rear-view mirror including an electrochromic film.

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; Box No. V citations and explanations supporting such statement The feature that is essential to the invention is 4. the feature whereby the active system is located on surface 2 of the first substrate. Such a selection is obvious. Claims 2 to 23 do not contain any features which, in combination with the features in claim 1, fulfil the PCT requirement of inventive step (PCT Article 33(3)).